

Rochester Institute of Technology RIT Scholar Works

Theses

Thesis/Dissertation Collections

5-13-2017

An Investigation of Process, Form, and Technique

Carter Hopkins
cjh4365@rit.edu

Follow this and additional works at: <http://scholarworks.rit.edu/theses>

Recommended Citation

Hopkins, Carter, "An Investigation of Process, Form, and Technique" (2017). Thesis. Rochester Institute of Technology. Accessed from

This Thesis is brought to you for free and open access by the Thesis/Dissertation Collections at RIT Scholar Works. It has been accepted for inclusion in Theses by an authorized administrator of RIT Scholar Works. For more information, please contact ritscholarworks@rit.edu.

ROCHESTER INSTITUTE OF TECHNOLOGY

A Thesis Submitted to the Faculty of
The College of Imaging Arts and Sciences
School For American Crafts
In Candidacy for the Degree of
MASTER OF FINE ARTS in Furniture Design

An Investigation of Process, Form, and Technique
By
Carter Hopkins
May 13, 2017

Thesis Title: An Investigation of Process, Form, and Technique

Thesis Author: Carter Hopkins

Thesis Committee Final Approvals

Chief Advisor: Andy Buck

Signature: _____

Date: _____

Associate Advisor: Adam Rogers

Signature: _____

Date: _____

Associate Advisor: Rich Tannen

Signature: _____

Date: _____

Associate Advisor: Peter Pincus

Signature: _____

Date: _____

Department Chairperson: Andy Buck

Signature: _____

Date: _____

ABSTRACT

For my thesis, I have made a body of furniture that investigates the relationship between my design process, and how it informs the technique, character, and aesthetics of the work. Through woodworking, I have investigated form and its importance the character in my furniture practice. From hand shaped solid wood, to lightweight volumetric forms, I have developed a language that explores the role of line, space, symmetry, structure, and material. I am influenced by the natural beauty of botanical forms, the line and repetition of boat building practices, the innovation and craftsmanship of furniture, and the spontaneity of sculpture. Each piece explores an amount of my devotion to furniture making and its role in my process of sketching, drawing, designing, and creating work.

The study as a whole is directly influenced by my lifestyle and life choices as an artist devoted to woodworking. I've decided to spend my life designing and making furniture. I find the field of furniture design intriguing because it's a way use woodworking and design to show the world my interpretation of furniture. Making my own artistic work based on my life allows me to clarify those life experiences, expand, and find rationale for day to day thinking as it relates to my work.

Throughout the study, I was confronted with the meaning of my process, and learning how the ability to manipulate it will really impact what I make. The initial goal of this thesis was to have a thorough personal investigation of form and technique through furniture making. I wanted to understand why I am attracted to organic, recurved, volumes and shapes, and how that relates to my desire to use specific woodworking techniques such as shaping with hand tools, or laminating veneer strips to make volumes. However, throughout physically making the body of work, that intention evolved into a larger and much more intimate study. I certainly investigated form and technique, but more importantly it became clear that I needed to gain an understanding of my own design process to have better control of the outcome of my work. Part of the process that I am trying to understand is deciding what to make, what truly inspires me and why, and what audience my work speaks to.

INTRODUCTION

An early goal of this work was to create objects that investigate form, and find a thoughtful balance of beauty and function. Creating that balance was a challenge from the start.

I have also been attempting to decipher what those forms I am attracted to are, and why I'm attracted to them. Throughout my education, I have always been attracted to repetitious, organic, volumetric forms such as botanical pods and sprouts, ancient Egyptian reed boats, or even agricultural fields in Upstate New York. I have repeatedly drawn, and painted, and made shapes and forms that capture these characteristics, but never felt like I explored it thoroughly enough as a furniture maker. I became curious if a thesis in woodworking and furniture design would provide a more clear reasoning for those attractions.

I know that I want to continue to pursue to make objects that contribute to the world primarily by aesthetic. I think the world can use more spontaneous, intentional beauty. I've never been into the idea of being just a traditional furniture maker contributing to the world by a creating incredibly functional work. I've always felt the need to make pieces unique to my particular aesthetic taste by eliciting beauty, and permitting existence in this world because they are well crafted and well designed.

I succeeded to make pieces that stood out beyond an everyday piece of furniture. As opposed to leaving pieces rectilinear and straight, I committed to altering nearly every surface, in an attempt to make these pieces all cared for, crafted, and incredibly unique. This was successful. However, the root of the study; the desire to understand and generate form and explore technique fell short. I had investigated one way of that; shaping solid wood within an arrangement of compositions and sizes. Inevitably, the pieces evolved through technique, aesthetic, and ideation as the goals of the thesis did as well.

I. CONTEXT

I have decided to spend my life making my own artistic work. I feel that furniture is a tool for my artistic expression, and I have a real passion for crafting these objects that I have cared for so that the world can experience them. Growing up, I had no idea what I wanted to do with my life. Around nineteen or twenty, I decided to choose the arts. After that, my choices transitioned more specifically to woodworking and furniture. Much of this was informed by watching, learning, and listening to my parents. Coming from a copier salesman and a print shop manager, they told me; “Whatever you choose to do, just make sure you want to wake up and do it.”

I want to wake up and design and build things. I’ve always been a tinkerer, a maker, a drawer, a painter; a “do-er”. Choosing the field of woodworking and furniture design provides me with a purpose, an outlet to professionally engage and communicate to the world, rather than to just tinker. Committing to this field will keep me questioning, keep me learning, and continuously evolving a practice that I can emphatically improve for a lifetime.

I often look at makers that have documented their lives, their work, and their devotion to making things they think should exist in the world. It is furniture makers such as Jere Osgood, Michael Hurwitz, and David Trubridge. It’s sculptors like Tapio Wirkkala, Isamu Noguchi, Constantin Brancusi. Or someone committed to craft, like Carl Aubock. These makers of all sorts share similarities by making their visions a reality, and of course differences with how their work interacts with the world. But what I admire most is their ability to passionately move it into the world while expressing their individual artistic voice in their pieces.

A maker like Jere Osgood is inspiring to me. As Studio Craft lends itself to one-off pieces or limited production, Jere really went down that path to see how far he could push that. One way he did this was by going as far as inventing technical processes that set him apart from any high-volume factory. Seen in one of his iconic desks, the tapered recurved



Figure 1 Jere Osgood. Ash Desk, 1984

legs create a composition so unlike any piece of furniture at that time.

Michael Hurwitz, one of Jere's pupils, has been successful in making a career out of his own personal furniture and aesthetic.

Influenced by his time spent in Japan, Michael creates one of a kind and small production pieces from his studio in Philadelphia. I admire his commitment to honing his technical ability to share it with the world. In an interview, he says:



Figure 2 Michael Hurwitz, Teacup Desk, 1994.

“There was a little scare the last few years where I almost lost it. There was so little work; this was after the market crashed in 2008, and for years there was almost no work – very uninteresting things to do for architects. So, after a few years of that, I was demotivated. I thought: Why would I spend the time to make something if there's nobody to buy it, nobody is interested, and there are really very few places to show it and no market for the kind of things that I want to make? I never had that thought or feeling before, and it was upsetting to feel that I had no job or sense of purpose. Today what brings me to the studio? I'm so happy to be alive and working again and what I like about working is there's always the thrill of discovery, there's always something that you hadn't anticipated that surprises you.”

To me, this is what I really admire about him as an artist, as a maker. I do like the aesthetics of his work, his techniques, his sensitivity to line and form. But what I share most with Michael would be his desire to make things and communicate with the world. He admits for a short time what it feels to have no sense of purpose if he can't share what he wants to share.

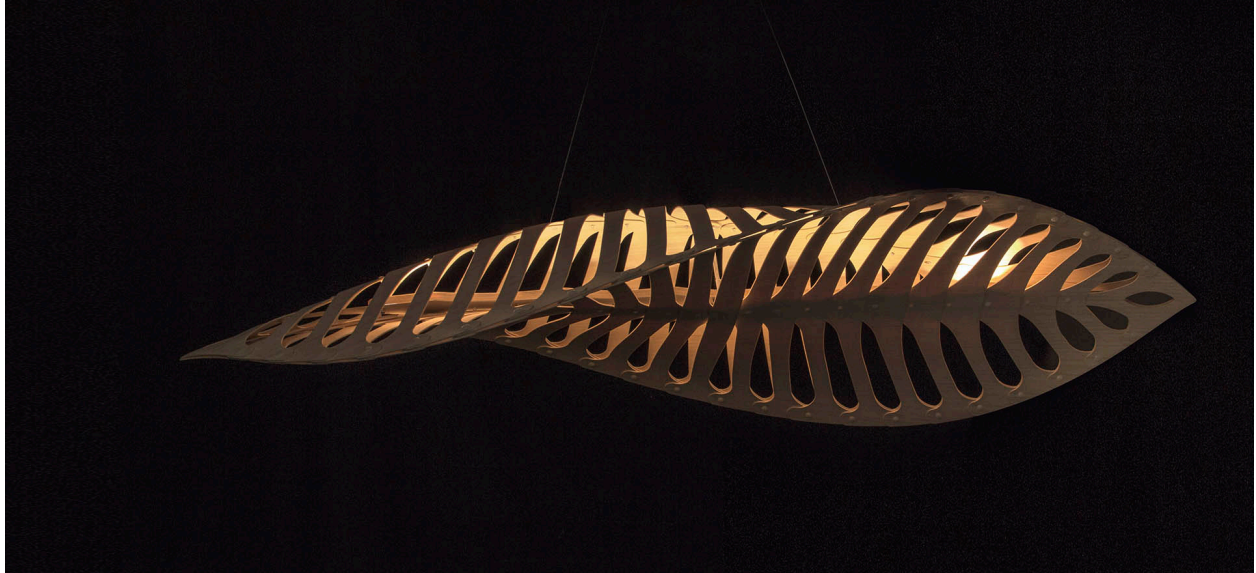


Figure 3 David Trubridge. Navicula, 2014.

David Trubridge as another great example, who conveys his taste to the world through lighting and furniture inspired by his life on and under the water of New Zealand. In his book *So Far*, he explains his belief that his work and his life are inseparable. It is from his experiences of living in northern England, to sailing with his family to New Zealand that provided him with respect for the environment and an awareness to the elements in nature to fuel his process for creating work. This is something I really admire, and I look forward to discovering and relating my life experience to my future work as well.

As Brancusi inspires myself, Trubridge writes about him as well. “He is unquestionably one of the most important modern artists, pointing the way for the history of form through the entire twentieth century. But he was also a consummate craftsman who brought an intimate understanding of his material from the rural traditions of Romanian woodcarving. His ideas were not imposed onto the material but grew out of its inherent qualities, which he skillfully used to express his vision”

These people aren’t just furniture makers, or sculptors, or craftsmen, or practitioners of any specific medium. These artists inspire me most because they stay true to their vision of creating their own work, honing their design and making abilities, communicating their values and passions to the world by providing objects that are quite literally a portion of their lives.

I think many makers sophisticate their hands with their minds to make objects that they don't fully understand themselves. This allows for self-reflection, critical analysis, and feeds the cycle to create more and more work. It's how I feel I have moved throughout my thesis.

One writing I find intriguing on the interpretation of designing and making is *The Nature of Art and Workmanship* by David Pye. In 1968, he writes "In the last 20 years there has been an enormous intensification of interest in design. The word is everywhere. But there has been no corresponding interest in workmanship. Indeed, there has been a decrease of interest in it. Just as the achievements of modern invention have popularly been attributed to scientists instead of to the engineers who have so often been responsible for them, so the qualities and attractions which our environment gets from its workmanship are almost invariably attributed to design."

I feel connected to this writing by David Pye, because I feel like from my generation specifically, workmanship is hardly appreciated. I take pride in entering a career and lifestyle that keeps that skills alive. I feel good about being an artist that makes furniture with knowledge of degrees of skill and product.

The goal of my thesis within this context is to discover how I can contribute beautiful furniture to the world in a way that satisfies my priorities in making. These priorities being to bring more beauty into the world by using the learned skill of craft and design, as well as to gain a better understanding of my inspiration for making objects.

Figure 4 Carl Aubock. Bowl, c.1950



II. THE BODY OF WORK

Mahogany Side Table

I started quickly. I started with what I knew. Nice wood, hand shaping, flowing transitions of mortise and tenon joinery from one nice top form to a few nice legs. I decided for it to be a table because it allowed me to explore my largest interest; shaping the underside. I decided to designate a front and a back on this piece by the shape of the top form. There is an elegant



*Carter Hopkins 1 Side Table. Mahogany, Milk Paint 2016
(16 x 21 x 18)*

recurve on the front edge along with the slightly canted front leg that gives its unique stance. It was a way to suggest that it was an end table, to be against another piece of furniture, a couch or even a wall. The top form, inspired by bean pods and botanical sprouts, was as if it was sliced horizontally, leaving the top surface exposed for functionality. The underside, painted with milk paint. I chose to cover the mahogany in milk paint to exaggerate the exposed mahogany on top.

In my opinion, the piece served as a great tool in beginning the study. It opened doors for discussion with my committee members. It began to identify values that I look for in my work. Beyond caring that my work is unique like many furniture makers do, I care that it feels like part of my progressive story as a custom furniture maker. The mahogany side table overall

was a quick study. With turned mortise and tenons, and an overall small scale, it provided an opportunity to respond to by following with a reaction table, the Sapele High Table.

Sapele High Table

As a reaction to the Mahogany Side Table, I wanted to clearly understand the intentions of my



Carter Hopkins 2. Sapele Side Table, Sapele.
2016 (14 x 24 x 36)

first piece. I wanted to properly shape the joints, while eliciting elegance, and clearly provide care for every component of the piece. In this case, that meant hand shaping. At 36 inches tall, I wanted the piece to have more presence in the room. Rather than rely on other furniture for it to be a complimentary piece, I wanted to make sure this table was a prominent piece of furniture. The overall feel of the piece is decorative. In many cases, I imagine this tall piece being complimented by a vase, flowers, or a pot. I envision this piece in a residential setting, in an entryway, or even as a sofa table. The simple recurved pod form of the top doesn't suggest increased functionality, nor does it ask for specificity. Like the Mahogany Side Table, the flat surface on top provided the amount of functionality I think is necessary for someone to own and enjoy.

This piece, and the piece prior were attempts to break an archetype. At this point, all I had done is variations of the mortise and tenon shaping I already knew. They were safe pieces, really. How much of this was coming from the desire to create interesting forms and expand my technical ability? There was a level of comfort while making this piece. There was no real large risk, or chance of failure. After designing it, I was confident I could make it. Furthermore, I felt confident I could base an entire body of work on the simple notion that each piece should have flowing transitions and mortise and tenon construction.

However, there was a level of disappointment this far in the body of work. Perhaps because this was so close to what I expected I would make. It was so close to what I have previously made that I began to feel numb to the satisfaction of making continuous forms from solid shaped parts. It's important to recognize that at this point, I felt I had exhausted the want to create a handful of pieces based on this particular aesthetic and technique. But at the same time, I didn't

feel the need to abandon the ideation of the process, and I needed to recognize that it contributed to more technical and more gratifying work to follow, based on the same fundamental principles and elements I was after.

Lofted Ash Table

The Lofted Ash Table was an important milestone in the body of work. After creating the first



Carter Hopkins 3. Lofted Ash Table, Ash. 2016 (16 x 16 x 36)

two pieces, something felt redundant about the construction methods of shaping mortise and tenon joinery and flowing transitions from one member to the next. At this point, I was confident I could have made an entire body of work based on this technique. I was beginning to see what I wanted the body of work to really be about. The creation of form began to be a priority, over functionality. I have always wanted to push farther than relying on those very specific techniques to make a piece of furniture interesting and unique.

As that shaping pertains to fundamentals of design, I began to research fundamental elements and principles of design. Since volume and form are of high priority, I wanted to explore further generation of forms and structures. With vintage dress forms as a reference and inspiration for creating a piece with line and

repetition, I designed an organic form that evokes interest through repetition and implied

volume. I discovered that I could generate form and structure through simple bent lamination and lofting through station points, those points being laminated rings.

I had the epiphany that I could bend three rings, and I could attach these bent laminations as they land on a ring that are parallel to the ground. Using simple joinery, I was able to make sense of the structure through full scale drawings and some simple geometry. I started by bending the ash veneer over a wide form in a vacuum bag with epoxy between layers. This granted me the opportunity to make many strips that don't vary in their bends. Simply put, this was a way I could make the same strips, hundreds of times over and over if necessary.

Making repetitive parts through laminating veneer largely contributed to efficiency when woodworking. Using wide veneer laminates is efficient. I can handle wide laminations by scraping, and sanding as a large plane before ripping it into smaller pieces, that fit into dado cuts on the connecting rings. This method made a lot of sense to me, and came easy when I figured out how to laminate those rings, and cut the dados accurately.

Something felt different each time I left the studio. Building this way, I was more excited to get into the studio each morning. It was gratifying to see the progress made when it was time to snap the accurate strips into the lofted station rings. The best way I can put it, I felt like I was starting to feel like many of my idols, or mentors that have seemed to accomplish making their work true to their values and desires. Michael Hurwitz, or Jere Osgood, for example. In some ways, this piece really felt like the beginning of much more to follow. I wasn't making this piece to create an illusion of a spectacle for everyone to appreciate. It felt like a piece I was proud of, and was beginning to reveal the truth to the maker I think I want to become.

Bamboo Bench

Through analyzing the Lofted Plant Stand, I began to question my devotion as a practitioner of furniture. I questioned my devotion to furniture, because at this point, I had created forms and shapes and compositions I was attracted to, but simply provided a flat surface to make it functional enough to consider the pieces to be furniture. What did this mean? At this point, I really did find myself in a dilemma. I asked myself many questions about what I make and why. Would it benefit me to just make a form without function, and see where that takes me? What would happen if I decided to base the development of a piece solely on aesthetic considerations?

This time around, I took a less traditional approach to furniture making. I wanted to see if that allowed for further exploration, to see if that opened any doors. I found the exploration to be



Carter Hopkins 4. *Bamboo Bench*. Bamboo, Baltic Birch. 2016
(77 x 18 x 20)

satisfying and frustrating in many different ways. For one, I thought it was great I could make decisions on the fly, and less on the drawing board. I created station points for lofting this time with Baltic Birch plywood, and steam-bent ash strips. Here, I wanted to take this opportunity to make something that was less reliant on geometry. In past pieces, I have felt burdened by geometry dictating the general form of the piece. An example being the Lofted Table. Virtually looking the same from every revolving angle, there is something nice about that, but also resulting in an expected feeling, perhaps a means to an end. I thought this bench was a good time to see what happens when I allow myself to work loosely, and perhaps create a form by non-traditional woodworking,

and cover with a skin, or technique that could push the character of the piece into new territory. This felt like a good impulse, in the spirit of the thesis to explore ends of the spectrum I have never attempted before.

As expected, I was confronting specific issues that I knew I would face. One being to cover the form uniformly, or to designate a seating surface to imply functionality. Here is when I was directly faced with the importance to my devotion of furniture. I asked myself whether or not I would cover the entire form completely without any reference to furniture. If I did this, I knew my work from that point on would need to face that decision. Ultimately, I decided that my devotion to furniture is something I want to continue to enjoy.

As the bench neared completion, I was satisfied with confronting those decisions. It was a good example of a question I was faced with, and working through a piece to answer those questions was the only way to answer it. From that point on, I began trying to understand what a “devotion” to furniture meant to me. Was it joinery? Is it functionality? What is it about furniture making that keeps me making it? More questions of course, but at this point in the study, I felt that more specific questions is what I was after in the first place.

In *A Theory of Craft* by Howard Risatti, there was a piece, *Tide Wave* by Yamaguchi Ryuun that



Figure 6. Yamaguchi Ryuun. Tide Wave

stood out to me. I wasn't looking for more bamboo structures to look at, at this point, I was nearing completion of the bench. The interpretation and classification of the bamboo piece was interesting. Risatti writes “...because it is made of bamboo rather than plastic monofilament or of metal wire, it is anchored in the natural world of the organic.” The woven bamboo brings the technique to the foreground, further emphasizing its handmade-ness. Although serving Yamaguchi Ryuun well, this posed an issue with me for my dedication to furniture making and the ideas of more pieces to come.

Wall Shelf

After confronting and confirming that my devotion to crafting furniture is an integral part of my process, I was faced with a new set of questions. How do I create an interesting form that I feel



Carter Hopkins 5. Cherry Wall Shelf, Cherry. 2017 (32 x 40 x 16)

good about, and have it be a desirable, functional piece of furniture? Here's an example of when I try to apply the logical process of David Trubridge's approach, as it relates to myself and my life.

This idea of ribs, shells, skeletons, became intriguing. Lofting one plane to the next as functional ribs, and making the structure complete with bent pieces to imply volume, like a skin. The nature of lofting station points lends itself to functionality, especially when solid planes. Used in boatbuilding, aircraft making, and architecture, I thought there is so many ways this method of creating volumes can be utilitarian.

Again, through sketching and full scale drawings, I made sense of the shelving components the projecting curves over planes in space. As the curve dictated the angle of the shelf, I used a full-scale

drawing to determine the spacing of the shelving. In the creation of the piece, I created boxes that held that spacing as I began to attach the exterior shell. One large decision here was the attachment of the tapered cherry pieces to the rib structure.

Ash Mirror

I feel strongly about the mirror being a positive result of analyzing previous pieces. When deciding to make this piece, I had a number of goals in mind. I set out to reach the goals that



Carter Hopkins 6. Ash Mirror. Ash, Glass 2017 (16 x 22 x 73)

previous works failed to accomplish, or goals provoked by making those pieces. The intention of this piece was to entertain and accomplish dilemmas previously discussed, while creating a piece with new functionality, like a mirror with a shelf.

Like those before, the piece is sequential by reacting strongly to the one prior. While the Wall Shelf had its strengths and successes, it raised question to functionality once again, and its relationship to the form as a whole. The form and the function remained as separate elements competing for attention.

I wanted to make a piece that the functionality seemed integrated to the

study and generation of form and volume. This desire was because of my desire to continue to make functional furniture that can use beauty as a main attraction to owning a piece. It was my

relationship with furniture that allowed to me make sense of the structure. I relied on mortise and tenon joinery. I gave myself the opportunity to keep straight lines in a piece, which was something that I've never done. I've always felt the need to bend and shape nearly everything I have ever made in an act to make parts interesting, rather than relying on the thoughtfulness and execution of the parts to be enough to fulfill that desire.

As a whole, the Mirror Volume made me feel good about my work. Although feeling discontent in some aspects of functionality, the generation of form and structure with the use of solid wood and traditional techniques felt on point. The relationship of the form to the functionality remained to be difficult to balance. Much of this relationship boils down to my designing and making process. To keep a loose process for creative opportunity is one thing, but to allow that looseness to abandon that commitment to functionality can happen all too quickly. In my mind, I have to prioritize and think of a way so that each aspect seems well thought.

Cherry Tray

As the final piece in the thesis, I feel that I really ended on a strong note. Although small in



Carter Hopkins 7. Cherry Tray. Cherry, Brass. 16 x 6 x 3

scale, I really feel like I was able to make this object with all of the above pieces in mind. Between each piece made in the body of work, I almost always got hung up on making the next piece a clear and precise move from the last. On this final piece, I decided to simply take a step

back, look around, see what made me feel good, what didn't make me feel so good, and make a tray based on those feelings.

When I stepped back, I liked the tapered spacing of the structure on the Cherry Wall Shelf. I liked the repetition and curve of the Lofted Ash Table. I disliked the chaos in the Bamboo Bench. I liked contrast of the rich color of the cherry wood, and the machined brass in the shelf as well.

I designed a piece based on what I did and didn't like from the rest of the work. And I felt great about it. Small in scale, but I felt that that was one of the successes of the tray. Initially, I wanted to make something larger. I thought about the attention to craft of Carl Aubock, and his bowls, trays, and key hooks. When I look at his work, I see satisfaction and care in his craft that I would like to see in my own work. I think the cherry tray is symbolic of that.

III. CONCLUSION

Throughout the eight-month process of deciding a thesis proposal, and making a body of work that relates to it, I've explored more dilemmas in furniture making than I thought I ever would. When creating the body of work, I started quickly by making. I instinctively let my hands tell me what I thought I wanted to explore. I think it's easy to see now that there were underlying themes for exploration early on in my work. I never had the idea that I was going to fully answer all of my expected questions by making a body of work. And I'm glad it didn't work out that way. I really do feel that using the last formal academic study of my life to discover, explore, and comprehend my process was well worth the investigation.

I understand that every maker's process will vary. After making this body of work, I see that my making process and my design process need to coincide to make decisions about my work. Initially, I didn't expect for the thesis to become so much about process. I was searching more for a theme, an aesthetic, or a launching point in which I could easily move from one piece to the next. Although this happened on some level, the deep thought and exploration came from

the process of not only making furniture, but deciding what to make and why. The dilemma of forms and the function that they provide, and at what point I intervene and insert functionality was under great scrutiny. I struggled with this and have not found a simple answer. It's something I look forward to confronting with myself and my work.

Also throughout the thesis, the reality of my existence in the world making things has become clearer. I need to make more work to decide exactly where I stand in the field of Furniture Design. At this point in time, there is conversation to be had between craft, design, and studio furniture that lends itself to labeling makers into categories where they "belong". Instead of choosing what category I wanted to belong to, I chose to make objects that mean most to my values in life. I look forward to making a plan that logically places my work into a category.

IV. ILLUSTRATIONS

Figure 1. Ash Desk, Jere Osgood. 1984

Figure 2. Teacup Desk, Michael Hurwitz. 1994

Figure 3. Navicula, David Trubridge. 2014

Figure 4. Bowl, Carl Aubock. 1950's

Figure 6. Tide Wave, Yamaguchi Ryuun.

PERSONAL IMAGES

Carter Hopkins 1 . Mahogany Side Table. Mahogany, Milk Paint. 16 x 21 x 18

Carter Hopkins 2. Sapele High Table. Sapele. 14 x 24 x 36

Carter Hopkins 3. Lofted Ash Table. Laminated Ash. 16 x 16 x 36

Carter Hopkins 4. Bamboo Bench. Bamboo, Ash, Baltic Birch. 77 x 18 x 20

Carter Hopkins 5. Cherry Wall Shelf. Cherry, Brass, Steel. 32 x 40 x 16

Carter Hopkins 6. Ash Mirror. Ash, Glass. 16 x 22 x 73

Carter Hopkins 7. Cherry Tray. Cherry, Brass. 16 x 6 x 3

V. BIBLIOGRAPHY

Risatti, Howard. *A Theory of Craft: Function and Aesthetic Expression*. Chapel Hill: U of North Carolina, 2007. Print.

Pye, David. *The Nature and Art of Workmanship*. London: Cambridge U.P., 1968. Print.

Staff: American Craft Council. *Reflections: Michael Hurwitz*. American Craft Council. 2014

Trubridge, David. *So Far*. New Zealand, 2013. Print.